United States Patent [19]

Yokotsuka et al.

[11] **3,897,570**

[45] **July 29, 1975**

[54] **PREPARATION OF AN ACIDIC BEVERAGE**

[75] Inventors: **Tamotsu Yokotsuka,** Nagareyama; **Yasuo Aoyama; Tadaaki Kikuchi; Shigetaka Ishii; Masaru Matsuura,** all of Noda, Japan

[73] Assignee: **Kikkoman Shoyn Co. Ltd.,** Tokyo, Japan

[22] Filed: **Jan. 28, 1974**

[21] Appl. No.: **437,320**

Related U.S. Application Data

[63] Continuation of Ser. No. 267,214, June 28, 1972, abandoned, which is a continuation of Ser. No. 114,053, Feb. 9, 1971, abandoned, which is a continuation-in-part of Ser. No. 796,544, Feb. 4, 1969, abandoned.

[30] **Foreign Application Priority Data**

Sept. 17, 1968 Japan 43-66562

[52] **U.S. Cl.** **426/46;** 195/29; 426/52; 426/190; 426/364; 426/365

[51] **Int. Cl.**[2] **A23L 1/20;** A23L 2/00

[58] **Field of Search** 426/364, 41, 49, 212, 52, 426/190, 46, 365; 195/62, 29

[56] **References Cited**

UNITED STATES PATENTS

3,170,802	2/1965	Fukushima	426/46
3,510,402	5/1970	Marshall	195/62
3,645,745	2/1972	Magnino, Jr. et al.	426/364
3,713,843	1/1973	Pour-el et al.	426/44
3,761,353	9/1973	Noe et al.	426/44
3,843,802	10/1974	Puski	426/46
3,846,560	11/1974	Hempenius et al.	426/46 X
3,852,480	12/1974	Williams	426/46

OTHER PUBLICATIONS

Fujimaki, et al., Applying Proteolytic Enzymes on Soybean, Food Technology, Vol. 22, 1968, (pp. 77–81).

Primary Examiner—David M. Naff
Attorney, Agent, or Firm—Cushman, Darby & Cushman

[57] **ABSTRACT**

An acidic beverage containing 1–4% peptides is prepared by denaturing defatted soybeans, reacting an aqueous mixture of the denatured defatted soybeans with an acid protease at a pH of 2.5 to 6.0 at a temperature from room temperature to 90°C to form peptides until before a ratio of formal-state nitrogen to total nitrogen in a filtrate of the mixture reaches 20%, separating a clear portion from the reaction mixture and adding to the clear portion a beverage additive.

13 Claims, No Drawings